ITEM 1

Proposed Amendment between California Energy Commission and The Regents of the University of California, - CIEE

Title:	Master Research Agreement with Regents of the University of California - CIEE
Amount:	$0.00
Term:	8 months
Contact:	Cathy Turner
Committee Meeting:	3/8/2011

Recommendation

Approve this amendment with The Regents of the University of California - CIEE for a eight- month no-cost time extension. Staff recommends placing this item on the consent calendar of the Commission Business Meeting.

Issue

The Master Research Agreement has over 88 Work Authorizations and eight are in need of additional time to complete critical project research. Work Authorizations requiring extension are: MRA-02-001, MRA-02-026, MRA-02-045, MRA-2-070, MRA-02-084, MRA-02-088, MRA-02-089 and MRA-02-090.

Background

The purpose of this Agreement is to fund research, development and demonstration awards for the Public Interest Energy Research (PIER) Electricity and Natural Gas Programs. The University of California-CIEE assists the Energy Commission in administering these awards. Awards are primarily made to researchers within the University of California, California State University and California Community College systems, Department of Energy Laboratories, governmental agencies and academic institutions of higher education from any state. CIEE is responsible for executing agreements with researchers and administering these agreements.

A Work Authorization (WA) specifying the tasks to be undertaken is to be used for all work assignments. A WA for research tasks is made on an "as-needed" basis. Each WA is approved by the Energy Commission at a Energy Commission Business Meeting and is subject to Department of General Services, Legal Office review.

The work through the WAs emphasizes innovative energy supply, transmission and end-use technologies, focusing on their reliability, affordability and environmental attributes. Research study topics include:

Buildings End-Use Energy Efficiency to decrease building energy demand by developing or improving energy-efficient technologies, strategies, tools and building performance evaluation methods including addressing system interactions through combined applications in low energy buildings, commonly referred to as zero-energy residential and commercial buildings.

Industrial/Agricultural/Water End-Use Energy Efficiency to increase power quality, reliability, and energy load reduction in industrial facilities and processes, agricultural operations, and water and wastewater treatment facilities; to improve process-related energy economics while reducing environmental pollution and meeting energy needs in a sustainable manner.

Renewable Energy to address the capital costs; reliability and dispatchability; the impacts on the safety and power quality of the electricity system; the nonenergy benefits; the potential of distributed generation; the emissions of renewable energy technologies; and the development of alternative fuel sources, particularly renewable sources such as biogas and solar energy which will slow the demand for more natural gas.

Environmentally-Preferred Advanced Generation to facilitate the widespread use of non-renewable distributed generation and to improve California's air quality by developing reliable, affordable, emission-reduction technologies for reciprocating engines, small turbines and microturbines, fuel cells, and hybrid fuel cell-microturbine technologies.

Energy-Related Environmental Research to better understand and address the effects of the environmental impacts that occur whenever energy is extracted, collected, transported, converted, or utilized.

Energy Technology Systems Integration to develop critical infrastructure changes that allow electricity and natural gas transactions to be made in a more effective, efficient, reliable, and environmentally acceptable manner.

Proposed Work

There are eight critical WAs underway that would benefit from a eight-month no-cost time extension to allow the California Energy Commission to fully benefit from the research projects. The research derived from these outstanding work authorizations will provide much needed information and results in several areas that include Carbon Sequestration, Demand Response, Smart Grid Reliability, Energy Efficiency in Heating, Ventilation and Air Conditioning, Lighting, and Buildings, both commercial and residential. To stop these research projects now, prior to receiving all of the research results, would not be cost effective and would incur the loss of United States Department of Energy funds. Also, it would fail to provide the information needed by the Energy Commission now and in the near future to make informed decisions regarding directions to take in the technology areas mentioned above. If this extension is not approved, several new contracts will need to be initiated to complete this work and result in added cost to the Califonria Energy Commission and the State of California.